

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/18541

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 B26B21/44 B65D83/14

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 B26B B65D B05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 053 422 A (TENISON) 11 September 1962 (1962-09-11)  column 2, line 6 -column 5, line 4; figures 1-3	1,2, 5-10, 12-14,34
A	---	26
X	US 5 234 140 A (DEMAREST SCOTT W ET AL) 10 August 1993 (1993-08-10)  column 1, line 54 -column 6, line 12; figures 1-12	1,2, 5-10, 12-14,34
A	---	26
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

**Special categories of cited documents :**

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority, claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*8\* document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
10 November 1999	17/11/1999
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016	Authorized officer  Herijgers, J

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 99/18541

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 238 882 A (HARRISON JACK R SR) 16 December 1980 (1980-12-16) cited in the application column 3, line 29 -column 6, line 29; figures 1-5 --- DE 43 35 449 A (FRICK HANS RUEDI ;FREI ALFONS (CH)) 21 April 1994 (1994-04-21) the whole document -----	1,8,15, 26  15

# INTERNATIONAL SEARCH REPORT

Information on patent family members				International Application No PCT/US 99/18541	
Patent document cited in search report	Publication date	Patent family member(s)		Publication date	
US 3053422	A	11-09-1962		NONE	
US 5234140		A	10-08-1993		AU 5574994 A 14-02-1994
					BR 9306815 A 08-12-1998
					CA 2141219 A 03-02-1994
					EP 0651721 A 10-05-1995
					JP 7509209 T 12-10-1995
					MX 9304550 A 29-04-1994
					NZ 276022 A 26-01-1996
					WO 9402385 A 03-02-1994
					ZA 9305433 A 22-02-1994
US 4238882		A	16-12-1980		NONE
DE 4335449		A	21-04-1994		DE 9214029 U 14-01-1993
					AT 168613 T 15-08-1998
					AU 665883 B 18-01-1996
					AU 5369894 A 09-05-1994
					BR 9305746 A 28-01-1997
					CA 2125955 A 28-04-1994
					WO 9408764 A 28-04-1994
					EP 0617655 A 05-10-1994
					JP 8510653 T 12-11-1996
					US 5761813 A 09-06-1998